REMARKS

Office action summary

Claims 1, 3-6, 8-16, and 18-29 are pending in the present application. Claims 1, 11, 16, and 23 are presently amended. No claims are presently cancelled or added. The following rejections were made in the office action of February 17, 2009 ("Office Action"):

- Claims 1 and 11-12 were rejected under 35 USC § 103(a) as being unpatentable over Liang et al, US Patent 7,299,216 ("Liang"), in view of Ardoin et al, US Patent 6,292,804 ("Ardoin").

- Claims 13-14 were rejected under 35 USC § 103(a) as being unpatentable over Liang in view of Ardoin, and further in view of Arnold, US Patent 5,535,378 ("Arnold").

- Claim 15 was rejected under 35 USC § 103(a) as being unpatentable over Liang in view of Ardoin, and further in view of Furusho, WO01/38967, using US Patent 6,886,082 as a provisional English translation, ("Furusho").

- Claims 3-4 were rejected under 35 USC § 103(a) as being unpatentable over Liang in view of Ardoin, and further in view of Desai et al, US Patent 6,567,816 ("Desai").

- Claims 5 and 8-9 were rejected under 35 USC § 103(a) as being unpatentable over Liang in view of Ardoin, and further in view of MacInnis et al, US Publication 2003/0219072 ("MacInnis").

- Claim 6 was rejected under 35 USC § 103(a) as being unpatentable over Liang in view of Ardoin and MacInnis, and further in view of Desai.

- Claim 10 was rejected under 35 USC § 103(a) as being unpatentable over Liang in view of Ardoin and MacInnis, and further in view of Furusho.

- Claims 16, 18-23, and 25-29 were rejected for substantially the same reasons as the rejections of claims 1, 3-6, and 8-10. (See Office Action, page 8.)

The rejections are discussed below. The examiner is respectfully urged to reconsider the application and withdraw the rejections. Should the examiner have any questions or concerns that might be efficiently resolved by way of a telephonic interview, the examiner is invited to call applicants' undersigned attorney, Jon M. Isaacson, at **206-332-1102**.

Rejections under 35 USC § 103(a)

Claim 1 stands rejected under 35 USC § 103(a) as being unpatentable over Liang in view of Ardoin. In the Official Action, the examiner argues that "transforming data is well known in the art" according to the following teachings of Liang:

> It is known in the art that in managing databases, extract, transform, and load (ETL) refers to three separate functions combined into a single program procedure. First, the extract function reads data from a specified source database and extracts a desired subset of data. Next, the transform function works with the acquired data--using rules or lookup tables, or creating combinations with other data--to convert it to the desired state. Finally, the load function is used to write the resulting data (either all of the subset or just the changes) to a target database, which may or may not previously exist.

(Office Action, pages 2-3 (citing Liang, col. 1, ll. 27-37).) Further, the examiner notes that Liang teaches an "operational data storage" (Liang, col. 5, ll. 61-64), which the examiner equates to the recited buffer of claim 1. (Office Action, page 2.) Finally, while conceding that Liang does not teach using pointers, the examiner cites to the following portions of Ardoin relation to the passing of pointers:

> Arrays are passed as two arguments: a ULONG indicating the number of elements in the array and a pointer to the first element. Zero size arrays are passed with a NULL pointer. On creation of the C function, array arguments are copied into a buffer within the C function. When called, the C function is passed a pointer into this buffer. Changing the contents of arrays and strings can only be done with IJComputeCFunction::ReplaceArgument.

(Office Action, page 3 (citing Ardoin, col. 39, ll. 55-62).) The examiner concludes that it would be obvious to one of ordinary skill in the art "to combine Liang with the general concept of passing pointers to functions to allow them to directly access data as taught by Ardoin in order to reduce memory requirements." (Office Action, page 3.)

Without conceding that propriety of the rejections in the Office Action, in an effort to expedite prosecution of the present application, applicants presently amend claim 1 to recite, in part:

> passing the first set of pointers to the data in the buffer to a first component in order for the first component to apply a first transform to the at least one column in the plurality of rows directly in the buffer *without moving the data within the buffer or copying the data to another location within the buffer or to another storage medium;*

> passing the first set of pointers to the data in the buffer to a second component in order for the second component to apply a second transform to the at least one column in the plurality of rows directly in the buffer *without moving the data within the buffer or copying the data to another location within the buffer or to another storage medium.*

(Emphasis added on present amendments.) Applicants respectfully submit that claim 1 patentably defines over the cited art for at least the reasons that (1) Liang and Ardoin, individually or in combination, fail to teach or suggest passing sets of pointers to data in a buffer to transform the data without moving the data or copying the data, and (2) the examiner uses impermissible hindsight in the reasoning for combining Liang with Ardoin.

First, applicants submit that Liang and Ardoin, individually or in combination, fail to teach or suggest passing sets of pointers to data in a buffer to transform the data without moving the data or copying the data. Regarding Liang, the cited portions discuss that extract, transform, and load functions can be performed to covert data "using rules or lookup tables, or creating combinations with other data." (Liang, col. 1, ll. 32-33.) Regarding Ardoin, the cited portions discuss the user of a pointer into a buffer. (Ardoin, col. 39, ll. 59-60.) However, applicants are unable to discern any teaching or suggestion in the cited portions of Liang or Ardoin that such a data conversion or the passing of pointers occurs without moving the data or copying the data within a buffer or to another storage medium. Therefore, applicants submit that claim 1 is patentably defined over the cited art. Accordingly, applicants request withdrawal of the rejection of claim 1 under 35 USC § 103(a).

Second, applicants submit that the examiner uses improper hindsight in the reasoning for combining Liang with Ardoin. Any conclusion of obviousness must "take[] into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and *does not include knowledge gleaned only from applicant's disclosure*, such a reconstruction is proper." (MPEP § 2145, citing *In re McLaughlin*, 170 USPQ 209, 212 (CCPA 1971) (emphasis added).) Thus, hindsight reasoning is improper when the examiner relies on knowledge gleaned only from an applicant's disclosure. As described above, the examiner's reasoning for combining Liang with Ardoin "in order to reduce memory requirements." (Office Action, page 3.) In the present application, applicants teach:

> [W]hen transforming data, a copy of the data extracted from the source
> and resident in memory (the primary copy) is again copied to a
> separate memory location, manipulated, and then copied back to the
> primary copy location. This unnecessary copying is both inefficient
> and can lead to data inconsistencies. What is needed in the art is a
> means for directly transforming a single buffered copy of data in
> memory without further copying of said data.

(Specification, para. 0005.) Thus, the examiner's reason for combining Liang with Ardoin

(i.e., reducing memory requirements) can be gleaned from applicants' disclosure. Further,

applicants can discern no portion of Liang or Ardoin which provides this knowledge and the

examiner has cited to no other source for this knowledge. Accordingly, applicants submit

that the examiner's reasoning for combining Liang with Ardoin is improper hindsight

because it includes knowledge gleaned only from applicants' disclosure.

For at least the foregoing reasons, applicants submit that claim 1 is patentably defined

over the cited art. Accordingly, applicants respectfully request withdrawal of the rejection of

claim 1 under 35 USC § 103(a).

Independent **claims 11, 16, and 23** are presently amended to include recitations

similar to those recitations of claim 1 discussed above. For at least the reasons discussed

above regarding the patentability of claim 1, applicants submit that claims 11, 16, and 23 are

patentably defined over the cited art. Accordingly, applicants respectfully request withdrawal

of the rejection of claims 11, 16, and 23 under 35 USC § 103(a).

Claims 3-6, 8-10, 12-15, 18-22, and 24-29 depend, directly or indirectly, from claims

1, 11, 16, and 23. Inasmuch as claims 3-6, 8-10, 12-15, 18-22, and 24-29 depend from

independent claims which are patentably defined over the cited art, applicants submit that

claims 3-6, 8-10, 12-15, 18-22, and 24-29 are patentably defined over the cited art.

Accordingly, applicants respectfully request withdrawal of the rejection of claims 3-6, 8-10,

12-15, 18-22, and 24-29 under 35 USC § 103(a).

Conclusion

Applicants believe that the present remarks are responsive to each of the points raised by the examiner in the Office Action, and submit that claims 1, 3-6, 8-16, and 18-29 of the application are in condition for allowance. Favorable consideration and passage to issue of the application at the examiner's earliest convenience is earnestly solicited.

Date: May 18, 2009

/Jon M. Isaacson/
Jon M. Isaacson
Registration No. 60,436

Woodcock Washburn LLP
Cira Centre
2929 Arch Street, 12th Floor
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439